(b) Steps taken to produce high quality coal include the following:

(c) Expeding development of ongoing projects and opening of new mines of production of coal-grades required for steel etc.

(ii) Setting up of coal handling arrangements for supply of uniform quality of coal for power and other industries.

(iii) Modificaton and modernisation of existing coking coal washeries.

(iv) Settng up of new washeries for washing of coking coals for use of steel plants.

(v) Setting up of coal beneficiation projects for supply of beneficiated coal mainly for some of the distant power stations located more than 1000 Kms from coalfields.

Output of CIL and SCCL

828. DR. B. B. DUTTA: Will the Minister of COAL be pleased to state:

(a) what is the output per manshift of CIL and SCCL in comparison with Australia and United States during 1990-91;

(b) whether it is a fact that productivity in underground mines has been more or less static during last thirteen years;

(c) if so, reasons for low productivity in coal mines; and

(d) steps taken to improve productivity in underground mines?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA): (a) Available productivity figures in terms of output per manshift (OMS) in respect of Australia and the United States compared with Coal India Ltd. (CIL) and Singareni Collieries Company Limted (SCCL) for the year 1990.91 are as under:—

Country	Output per Manshift (Tonnes)	
	Underground	Opencast
Australia (Queensland)	14.9	30.6
United State	19.3	47.7
India		
CIL	0.53	3.31
SCCL	0.65	4.74

(b) and (c) It s a fact that the productivity in underground mines has been more or less satic in Coal India Ltd. during last 13 years. Main reasons for low productivity in Indian underground mines are as under:—

(i) Majority of the underground having geo-mining problems like steep manually.

(ii) Many underground mines are haing geo-mining problems like steep and multiple seams, occurrence of fires and water logged old workings in adjoining areas, builtup surface structures which need protection by sand stowing etc. requiring employment of sizeable workforce for dealing with such unproductive activities.

(iii) High rate of absenteeism.

(iv) Coal companies are required to provide supporting services for workshops ware-houses, water supply colony maintenance etc. through departmental workforce, which gets added to the total manpower for computation of

output permanshift lowering the overall productivity figure.

(v) Power shortage and frequent interruptions in power supply in eastern region affecting operations in ECL, BCCL and CCL mines.

(d) Measures Taken to improve productivity in Coal Mines are:

(i) Mechanisation of Board and Pillar workings by introduction of Load Haul Dumpers (LHD) and Side Discharge Loaders.

(ii) Deployment of higher capacity equipments like draglines, shovels, dumpers and drills in opencast mines.

(iii) Improving performance of all equipments including powered support longwall equiment by providing necessany inputs as well as system improvement.

(iv) Improved manpower plannig including redeployment as well as rationalisation of manpower through Voluntary Retirement Scheme, already in vogue.

(v) Introduction of all men all jobs concept wherever feasible.

(vi) Improvement in availability and utilisation of equipment by providing necessary workshop support, improved management of spare parts etc.

(vii) Imrovement in working conditions by providing better ventilation, better lighting and improved communication systems in underground mines.

(viii) Improvement in power supply particularly in the coal mines of eastern region through construction of direct feeders to obtain power from DVC and setting up of captive power plants in selected locations.

(ix) Improvement of communication between managers, supervisors and workers through regular Joint Consultative Committees. operating in different coal companies.

Output of gas from Dankuni plant of Raniganj Coal Mines

829. SHRI DIPANKAR MUKHERJEE: SHRI MD. SALIM:

Will the Minister of COAL be pleased to refer to the answer to Unstarred Question No. 1748 given in the Rajya Sabha on 19th December, 1994 and state:

(a) what has been the average output of gas per tonne of coal made available to the Dankunj Plant from Raniganj coal mines and what is the rated output of gas per tonne of coal as per the original design;

(b) what are the reasons for huge accumulation of coke in the Plant despite operation of three batteries at reduced load.

(c) what is coke stock at present within the plant;

(d) what measures are being taken to liquidate the same;

(e) if designed coal was available how is it that the plant generates such a huge amount of coal fines; and

(f) what has been the producton of coke and coal fines in January, 1995 and how far this has been as per the original designed norms?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA): (a) For Dankuni Coal Complex out-put of gas per tonne of coal charged into the retorts as per the original design is 300 to 320 normal cubic metres (NMB). The average output of gas per tonne of coal charged into the retorts during the year 1994-95 is about 270 NM3.

(b) to (d) The accumulation of CILCOKE in the past had been on account of lack of demand. Currently the